

QUIZ!

Use a full sheet of 8½x11" paper. (Half sheet? Half credit!)

Put only your last name in the far upper left hand corner of the paper, where a staple would hit it. (It's OK to write **BIG**, just start in the corner!)

*Mitchell*

**AVOID A ½-POINT DEDUCTION!**

Numbering responses may help you avoid overlooking a question; it's ok to go ahead and pre-number your sheet.

Feel free to abbreviate.

3 minutes; 3 points

## Quiz 7, February 24, 2015

3 minutes; ½ point/answer; 3 points total

1. Other than the fact that Haskell lists can't be changed, what's a major difference between Ruby arrays and Haskell lists?
2. What's a major difference between strings in Ruby and Java?
3. In Ruby, given `s="abc"` what is the TYPE of `s[0]`?
4. In Ruby, given `s="testing"` what is the VALUE of `s[2,2]`?
5. Write a Ruby program that behaves like this:

```
$ ruby q7.rb
```

```
ab
```

```
cd
```

6. Haskell folding functions take two arguments. What are good names for them? (What does `whm` name them?) Don't worry about their order!

## Solutions

1. Other than the fact that Haskell lists can't be changed, what's a major difference between Ruby arrays and Haskell lists?  
Ruby arrays are heterogenous.
2. What's a major difference between strings in Ruby and Java?  
Three that come to mind: Ruby strings are mutable, accessible with indexing operators, and are indexable from the right.
3. In Ruby, given `s="abc"` what is the TYPE of `s[0]`?

```
>> s = "abc"; s[0]
=> "a"
```

```
>> it.class
=> String
```

4. In Ruby, given `s="testing"` what is the VALUE of `s[2,2]`?

```
>> s = "testing"; s[2,2]
=> "st"
```

5. Write a Ruby program that behaves like this:

```
$ ruby q7.rb
ab
cd
```

Short answer:

```
puts "ab\ncd"
```

Long answer:

```
puts "ab"
puts "cd"
```

6. Haskell folding functions take two arguments. What are good names for them?

**acm** and **elem** (or **val**)

Other perfect answers:

**a** and **e**

**v**, **a**

value and accumulator